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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,470	01/29/2001	Osamu Kizaki	202544US2	6828

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EXAMINER	
EDWARDS, PATRICK L	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/770,470	KIZAKI ET AL.	
	Examiner	Art Unit	
	Patrick L. Edwards	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The response received on 22 May 2006 has been placed in the file and was considered by the examiner. An action on the merits follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5, 6, 17, 20, 24, 25, 36, 38, 39, 43, 44 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada (USPN 6,239,837 B1) and Ikegaya (USPN 5,379,124).

With regard to claim 39, which is representative of claim 1, Yamada discloses at least two storing means different in storing format from each other; each for storing image data input via inputting means, said at least two storing means including an external storage and at least one of a video memory and a hard drive (see Yamada Figure 4: The reference discloses a frame memory, a main memory, and an auxiliary memory. Applicant has correctly asserted that the main memory and the auxiliary memory are both non-volatile memories. As a result, both the main memory and the auxiliary memory are long-term memories. The frame memory, however, is a short-term volatile memory (Yamada col. 6 lines 1-8). Therefore the claimed limitation of "at least two storing means different in storing from each other" is met by the Yamada reference. The image pickup optical system disclosed in Yamada is analogous to the inputting device recited in the claim. Further, the claimed limitation that "at least two storing means including an external storage and at least one of a video memory and a hard drive is also met by Yamada. The main memory is a hard drive. The auxiliary memory is external storage.

Yamada further discloses a transfer controller constructed to control transfer of the image data between the storing devices (column 1 lines 48-51). The control means disclosed in Yamada is analogous to the transfer controller recited in the claim in that it controls the transfer of the image data between the storing devices.

Yamada further discloses a checking device included in the transfer controller which determines whether or not a storing device included in a destination, to which the image data should be transferred, has a capacity great enough to store the image data (column 1 lines 65-67). Yamada discloses that this determination is made by the transfer controller (control means), but does not explicitly state that a checking device included in the transfer controller is making the determination. The transfer controller, however, would not be able to make this determination without employing some sort of checking device. As a result, a checking device is inherently included in the transfer controller.

Yamada further discloses a system configured for use in a digital camera. A digital camera is inherently an image forming apparatus.

Yamada fails to expressly disclose an image printing device that is configured to output to a sheet and image corresponding to said image data directly. Ikegaya, on the other hand, discloses a "memory checking" technique similar to that of Yamada, but does so in the environment of a print device that outputs to a sheet (see Ikegaya, generally). It would have been obvious to one reasonably skilled in the art at the time of the invention to apply Yamada's memory-efficient image transfer system to an image printer environment as taught by Ikegaya. Such a modification would have allowed for a printing system that was operable to deal with memory capacity restrictions that were known and problematic in the facsimile environment (see Ikegaya col 1 lines 33-36).

With regard to claim 20, Yamada discloses a method of controlling a transfer of image data, input via inputting means, between a plurality of storing means which determines whether or not the destination storing means has a capacity great enough to store the image data, and interrupts the transfer if the capacity of the storing means is short (column 1 line 65 – column 2 line 4). The temporary stopping of transferring as disclosed in Yamada is analogous to interrupting the transfer as recited in the claim.

With regard to claim 38, a computer-readable recording medium that stores a program which causes the computer to execute the steps of a method is essential if the image processing method disclosed in Yamada is to function. Therefore, a computer-readable recording medium is inherent in the teachings of Yamada.

With regard to claim 55, which is representative of claims 17 and 36, Yamada discloses that the checking device determines whether or not the transfer is allowable by determining whether or not the residual capacity is zero (column 11 lines 40-51).

With regard to claim 43, which is representative of claims 5 and 24, Yamada discloses a display configured to display, when said checking device does not allow the transfer because the total amount of the image data exceeds the residual capacity of the destination, a short memory capacity or the total amount of the image data of the image files or the pages designated and the residual capacity of the destination (Yamada column 10 lines 16-34).

With regard to claim 44, which is representative of claims 25 and 6, Yamada discloses displaying the number of image files in the main memory (files designated for transfer) and the number of files that can be copied to the destination storing device (column 10 lines 16-35). The amount of image files that need to be reduced in order for the transfer to be allowed is simply the difference between these two numbers. As long as the number of files that can be copied to the destination storing device is more than zero, image data can be transferred if the amount to be transferred is reduced. As a result, all of the limitations of the claim are inherent in Yamada.

4. Claims 19 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada and Ikegaya, and further in view of Nakatani (USPN 5,063,459).

With regard to claim 57, which is representative of claim 19, the arguments related to the image storing device given with respect to claim 39 in paragraph 3 above are incorporated herein. Yamada further discloses an inputting device comprising an image data storing device, which includes an interface (Yamada column 4 lines 20-42 in conjunction with Figure 3), and receives image data output from an image reading unit (Yamada column 5 lines 13-35 in conjunction with Figure 4). The combination of the CCD device 76, the process circuit 78 and the A/D converter 80 as disclosed in Yamada is analogous to the image reading unit recited in the claim.

Yamada further discloses outputting image data from the image storing device (Yamada column 3 lines 34-39), but fails to expressly disclose an image forming device which forms an image in accordance with the output data. Nakatani, however, discloses an image forming device for forming an image in accordance with data output from a storing device (Nakatani column 1 lines 56-59). It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Yamada's image processing apparatus by including an image forming means to form images in accordance with output data of the storing device as taught by Nakatani. Such a modification would have made for a more robust image processing apparatus that could form images from memory for the purpose of displaying or further processing them.

5. Claims 2, 5, 6, 16, 21, 24, 25, 35, 40, 43, 44 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada and Ikegaya, and further in view of Wakui (USPN 5,742,339). The arguments as to the relevance of Yamada as applied to claims 1, 20 and 39 in paragraph 2 above are incorporated herein.

With regard to claim 40, which is representative of claims 2 and 21, Yamada determines the amount of residual capacity in the destination storing device and the amount of image data designated for transfer (the amount of image data stored in main memory) and the number of these designated images that can be transferred to the destination storing device (Yamada column 9 line 65 – column 10 line 10). Yamada displays this information and allows the user to make the determination of whether or not a transfer is allowable. Wakui, however, discloses making a comparison to determine whether or not a transfer is allowable (Wakui column 9 lines 1-12 in conjunction with Figure 2B).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Yamada's image storing device by adding the determination of transfer allowability as taught by Wakui. Such a modification would have eliminated the possibility of user error in transferring images to the destination storing device by not allowing a transfer in which the image data to be transferred exceeded the residual capacity of the destination storing device. This would have made for a more robust, user-friendly device.

With regard to claim 54, which is representative of claims 16 and 35, Yamada determines a number of residual files available at the destination and a number of files designated as objects of transfer (Yamada column 9 line 65 – column 10 line 10). Yamada displays these numbers and allows the user to make the determination of

whether or not a transfer is allowable. Wakui, however, discloses making a comparison to determine whether or not a transfer is allowable. (Wakui column 9 lines 1-12 in conjunction with Figure 2B).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Yamada's image storing device by adding the determination of transfer allowability as taught by Wakui. Such a modification would have eliminated the possibility of user error in transferring images to the destination storing device by not allowing a transfer in which the image data to be transferred exceeded the residual capacity of the destination storing device. This would have made for a more robust, user-friendly device.

With regard to claim 43, which is representative of claims 5 and 24, Yamada discloses a display for displaying the total amount of image data of the designated image files and the residual capacity of the destination (Yamada column 10 lines 16-35). The image data stored in the main memory as disclosed in Yamada is analogous to the designated image files as recited in the claim.

With regard to claim 44, which is representative of claims 6 and 25, the combination of Yamada and Wakui teaches determining whether or not a transfer of designated image files is allowed based on a comparison between the size of the designated files and a residual memory capacity. The combination also teaches displaying the total number of image files designated for transfer and the number of files that can be transferred to the destination. Consequently, the determination of whether or not the image data can be transferred if a number of image files is reduced is taught in the combination of Yamada and Wakui.

6. Claims 7-9, 11-15, 26-28, 30-34, 45-47 and 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada, Ikegaya, and Wakui as applied to claims 2, 21 and 40 above, and further in view of Yoshiura et al. (USPN 5,854,693). The arguments as to the relevance of Yamada and Wakui as applied in paragraph 5 above are incorporated herein.

With regard to claim 45, which is representative of claims 7 and 26, the combination of Yamada and Wakui discloses determining whether or not a transfer can be made if a number of the image files or pages is reduced (see the argument with respect to claim 44 above), but does not expressly disclose determining the image files whose designation should be canceled. Yoshiura, however, discloses determining the image files whose designation should be canceled (Yoshiura column 5 lines 35-43). The image data transferred through the transmission apparatus to another image processing apparatus as disclosed in Yoshiura is analogous to the image data whose designation is canceled as recited in the claim. It would have been obvious to one reasonably skilled in the art at the time of the invention to modify the combination of Yamada and Wakui's image storing apparatus in order to determine which designated image files not to transmit to the destination. Such a modification would have allowed for a more robust system in that it would automatically determined which image files to send and which ones should have their transmission canceled.

With regard to claim 46, which is representative of claims 8 and 27, Yamada discloses estimating the number of image files that can be transferred to the destination storing device such that image files are transferred

until there is no longer space to hold any more (Yamada col. 9 line 65 – col 10 line 10). As a result, the limitation that a minimum number of image files is cancelled is taught in the combination of Yamada, Wakui and Yoshiura.

With regard to claim 47, which is representatiave of claims 9 and 28, Yamada discloses estimating the number of image files that can be transferred to the destination storing device such that image files are transferred such that image files are transferred until there is no longer space to hold any more Yamada col. 9 – col 10 line 10). As a result, the limitation that the transfer of image files is cancelled such that the residual capacity of the destination storing device becomes a minimum is taught in the combination of Yamada, Wakui and Yoshiura.

With regard to claim 49, which is representative of claims 11 and 30, all of the limitations of the claims have been addressed in the above argument with respect to claim 47.

With regard to claim 50, which is representative of claims 12 and 31, all of the limitations of the claim have been addressed in the above argument with respect to claim 46.

With regard to claim 51, which is representative of claims 13 and 32, Yamada discloses displaying the files which are to be transferred into storage and Wakui discloses a display which shows a user when the transfer of an image file is cancelled. As a result, the combination of Yamada, Wakui and Yoshiura teaches displaying the image files to be cancelled.

With regard to claim 52, which is representative of claims 14 and 33, Yamada further discloses distinguishing the image data which have been transferred into the destination storage and image data which have not been transferred (Yamada column 9 line 66 – column 10 line 10).

With regard to claim 53, which is representative of claims 15 and 34, all of the limitations of the claim have been addressed in the above argument with respect to claim 51.

7. Claims 3, 4, 22, 23, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada, Ikegaya, and Wakui as applied to claims 2, 21 and 40, and further in view of well known prior art. The arguments as to the relevance of Yamada and Wakui as applied in paragraph 5 above are incorporated herein.

Referring to claim 41, which is representative of claims 3 and 22, the claim further limits claim 40 by adding that the checking device determines transfer allowability before the start of the transfer and that the destination storing device inhibits a plurality of simultaneous write accesses.

Referring to claim 42, which is representative of claims 4 and 23, the claim adds that the storing device of claim 41 uses a write limiting type of storing medium.

With regard to the first limitation of claim 41 (as listed above), Wakui discloses determining whether a transfer is allowable before the start of the transfer (Wakui column 9 lines 1-12).

With regard to the latter limitation of claim 41 and the limitation of claim 42, Yamada and Wakui disclose a generic destination storing device and fail to specify whether or not the storing device inhibits a plurality of simultaneous write accesses or uses a write limiting type of storing medium. Storing devices that inhibit a plurality

of simultaneous accesses and use a write limiting type of storing medium, however, are well known in the art (Official Notice). The problem addressed by Yamada and Wakui's system is true of any storage device, regardless of its specific characteristics. It would have been obvious to one reasonably skilled in art at the time of the invention to determine transfer allowability to the destination storing device before making the transfer, regardless of whether the device inhibited simultaneous write access or used a write limiting type of storing medium, in order to prevent erroneous transfers of image data.

8. Claims 18, 37 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada and Ikegaya, and further in view of well-known prior art. The arguments as to the relevance of Yamada as applied in paragraph 2 above are incorporated herein.

Referring to claim 56, which is representative of claims 18 and 37, the claim recites all of the limitations of claim 55 and further adds that the checking device makes this determination when the destination storing device allows a plurality of simultaneous accesses. Yamada discloses a generic destination storing device (auxiliary memory) and does not specify whether or not the storing device allows a plurality of simultaneous accesses. Storing devices that allow a plurality of simultaneous accesses, however, are well known in the art (Official Notice). The problem addressed by Yamada's system is true of any storage device, regardless of its specific characteristics. It would have been obvious to one reasonably skilled in art at the time of the invention to check the residual capacity of the storage device, regardless of whether it allows for simultaneous access, in order to ensure that it had the capacity to store the transferring image data.

9. Claims 10, 29 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yamada, Wakui, Ikegaya and Yoshiura as applied to claims 8, 27 and 46 above, and further in view of Ikegaya. The arguments as to the relevance of this combination as applied in paragraph 6 above are incorporated herein.

With regard to claim 48, which is representative of claims 10 and 29, Ikegaya discloses cancelling the transmission of the image files which have a low order of designation (Ikegaya column 8 lines 47-66). The priority of image data as disclosed in Ikegaya is analogous the the order of designation as recited in the claim. The method of transmitting image data preferrentially on the basis of high priority as disclosed in Ikegay is analogous to maximizing image files with a low order of designation as recited in the claim. It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Yamada, Wakui and Yoshiura's image storing apparatus by cancelling the transmission of image files on the basis of priority as taught by Ikegaya. Such a modification would have made for a system in which only the most important image data was transferred and the image files which were not as crucial weren't taking up a limited residual capacity in a storage device.

10. Claims 58 and 59 are rejected under 35 USC 103(a) as being unpatentable over the combination of Yamada and Ikegaya, as applied to the parent claims above, and further in view of well known prior art. Neither Yamada nor Ikegaya disclose that the image data is created from a copier, but this is a commonly known way of creating image data (Official Notice) and it would have been obvious to create image data in this manner.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards Art Unit 2621

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JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER